

## Title (en)

Composite thin film holding substrate, transparent conductive film holding substrate, and surface light emitting body

## Title (de)

Verbundstoffdünnschichthaltesubstrat, Haltesubstrat für transparente leitfähige Folie und Körper mit Oberflächenlichtabgabe

## Title (fr)

Substrat support de film mince composite, substrat support de film mince conducteur transparent et corps électroluminescent de surface

## Publication

**EP 2420539 A1 20120222 (EN)**

## Application

**EP 11189370 A 20021024**

## Priority

- EP 02775391 A 20021024
- JP 2001327878 A 20011025
- JP 2001327879 A 20011025

## Abstract (en)

There is provided a composite thin film-holding substrate in which a composite thin film (4) comprising a filler (2) having a refractive index lower than that of a substrate (1) and a binder (3) having a refractive index higher than that of the filler (2) is formed on a surface of the substrate (1). Light is efficiently scattered when passing through the composite thin film (3) which comprises the filler (2) and the binder (3) having different refractive indexes from each other. In addition, the refractive index of a composite thin film (4) comprising a filler (2) having a low refractive index is low. As a result, the discharge efficiency of light which passes through the composite thin film (4) from the substrate (1) to the external is improved.

## IPC 8 full level

**B32B 7/02** (2006.01); **B32B 27/20** (2006.01); **C09D 7/61** (2018.01); **C09D 7/65** (2018.01); **G02B 1/10** (2006.01); **G02B 5/02** (2006.01); **G02F 1/133** (2006.01); **H01J 5/16** (2006.01); **H01L 51/00** (2006.01); **H01L 51/52** (2006.01); **H05B 33/02** (2006.01); **H05B 33/14** (2006.01)

## CPC (source: EP KR US)

**C09D 7/61** (2018.01 - EP US); **C09D 7/65** (2018.01 - EP US); **C09D 7/70** (2018.01 - EP US); **G02B 1/10** (2013.01 - EP US); **G02B 1/11** (2013.01 - US); **G02B 5/0236** (2013.01 - EP US); **G02B 5/0242** (2013.01 - EP US); **G02B 5/0247** (2013.01 - EP US); **G02B 5/0278** (2013.01 - EP US); **H01J 5/16** (2013.01 - EP US); **H05B 33/22** (2013.01 - KR); **H10K 50/854** (2023.02 - EP KR US); **H10K 77/10** (2023.02 - EP US); **C08K 3/36** (2013.01 - EP US); **C08K 7/22** (2013.01 - EP US); **C08L 2205/20** (2013.01 - EP US); **H01J 2211/44** (2013.01 - EP US); **Y02E 10/549** (2013.01 - EP US); **Y10T 428/24942** (2015.01 - EP US); **Y10T 428/25** (2015.01 - EP US); **Y10T 428/259** (2015.01 - EP US); **Y10T 428/265** (2015.01 - EP US); **Y10T 428/31663** (2015.04 - EP US)

## Citation (applicant)

- JP 2001202827 A 20010727 - MATSUSHITA ELECTRIC WORKS LTD, et al
- US 4402827 A 19830906 - JOSEPH A DAVID [US]
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- US 5137279 A 19920811 - MURPHY DANIEL L [US], et al
- US 5124364 A 19920623 - WOLFF BERNARDO [DE], et al
- JP H05279011 A 19931026
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## Citation (search report)

- [I] JP 2001154004 A 20010608 - KEIWA INC
- [A] DE 4418214 A1 19951130 - HUGO GERD [DE]

## Designated contracting state (EPC)

DE FR GB NL

## DOCDB simple family (publication)

**EP 1445095 A1 20040811**; **EP 1445095 A4 20070530**; **EP 1445095 B1 20121226**; EP 2226365 A1 20100908; EP 2226365 B1 20160810; EP 2420539 A1 20120222; KR 100671990 B1 20070124; KR 20040047949 A 20040605; TW 574110 B 20040201; US 2004253427 A1 20041216; US 7582351 B2 20090901; WO 03035389 A1 20030501

## DOCDB simple family (application)

**EP 02775391 A 20021024**; EP 10164271 A 20021024; EP 11189370 A 20021024; JP 0211023 W 20021024; KR 20047005965 A 20021024; TW 91124796 A 20021024; US 49253404 A 20040423